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The Principles of Menu Making

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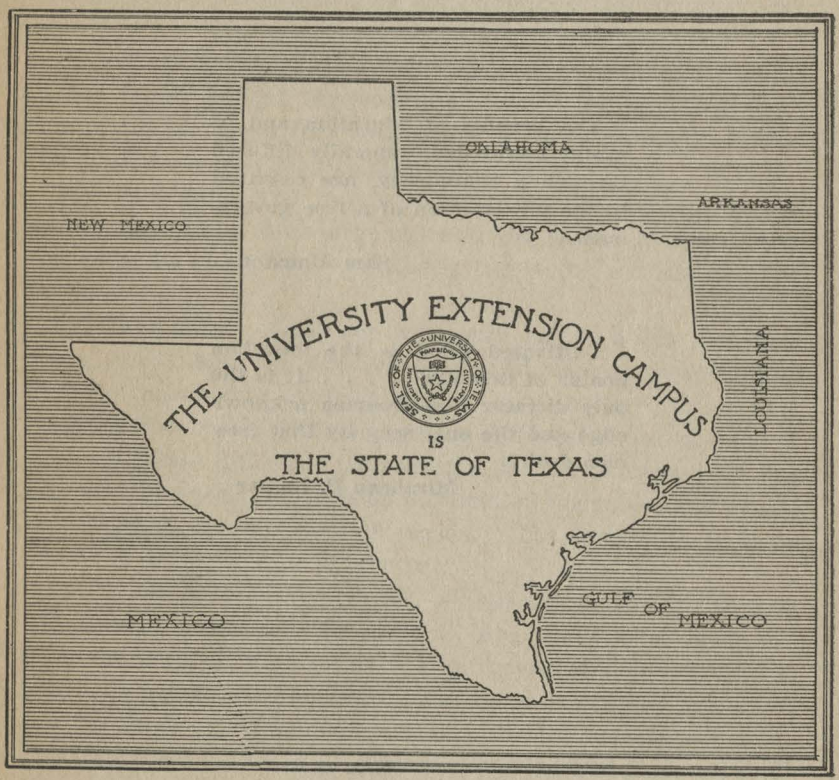

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The benefits of education and of useful knowledge, generally diffused through a community, are essential to the preservation of a free government.

Sam Houston

Cultivated mind is the guardian genius of democracy. . . . It is the only dictator that freemen acknowledge and the only security that freemen desire.

Mirabeau B. Lamar

THE PRINCIPLES OF MENU MAKING

The question of the daily menu is one of the most important ones that faces the housewife. What food shall she give her family to eat? In what proportion shall she give these foods to meet the individual needs of each member of the group?

Food a Necessity of Life.—Nature has provided no substitute for food. Food is absolutely necessary to our life. Man must eat to live. Common experience shows us that if the body is denied food for long, it wastes away, and finally death results. Life flourishes best where there is an abundant and suitable food supply.

So well recognized is this importance of food that in making up the family budget, for moderate incomes, the largest proportion of the income is for food, and, if need be, as much as two-thirds of the income may be spent on food.

The housewife, who in most cases does the buying for the family, thus has a very large share of the income to spend, and this must be spent wisely, if she is to get the returns due her family.

Choice of Food.—Long ago when man had to utilize for food, roots, grains, and flesh that were at hand, choice was so limited that the purchasing of food was an easy matter. Now that facilities for transportation place most foods at our command, choice becomes difficult. This is still further increased by the fact that by special cultivation all sorts of vegetables and fruits are available, in and out of season. The housewife is in a quandary to know what to choose.

Factors in Determining Choice.—What are some of the factors which must determine her choice? Are the dearest foods always the best? By no means. High prices and high nutritive values do not go hand in hand. Too often exorbitant prices are paid for foods out of season which furnish little real nourishment. The important guides in determining what sort of foods we shall buy are (1), the use of the food in the body, and (2), the composition of the food.

Uses of Food.—The chief characteristics of living bodies are

the power to grow, to develop, and to move, to work and to expend energy. Man develops from a tiny babe to the adult creature. During the process much energy is expended. What is the source of the tissue needed by him to develop and grow? What supplies the energy?

Notice the small boy with his unbounded supply of energy and his insatiable appetite. The two go hand in hand. We cannot build an automobile without material from which to construct it, nor run the machine without fuel. The human machine is very like the automobile. Food, then, is needed in the body to build up new tissue, repair waste, and furnish the necessary fuel for all energy.

Classification of Foods.—According to the use of foods in the body we can classify them into

I. Tissue Building or Repair Foods. { Protein, Water, Mineral.

II. Energy Producing Foods. { { Starches, Sugars, } Carbohydrates. Fats, Proteins,

Under these groups all of our foods can be classified.

Protein foods are largely of the same material as our own bodies. No matter how abundant the diet, without some protein food, we cannot live, for there must be a constant renewal of broken down tissue, and only protein can build it up.

The chief sources of protein among our common food stuffs are meat foods, as beef, lamb, eggs, milk, cheese and such vegetable foods as peas, beans, lentils, cereals.

Water is truly a food, for the body can not live without water. If we are denied all food including water, we will die of starvation much more quickly than if water were taken. About two-thirds of the weight of the body is water. Water is present in the blood and all other fluids of the body. It is essential to the transportation of nourishment to the cells and to the carrying off of waste material.

The body excretes about four and one-half pints of water daily through the kidneys, lungs and sweat glands. We thus see

that a large amout of water must be taken to keep the body in good condition. Many of our foods contain large quantities of water. For example, milk contains about 87 per cent, meat about 50 per cent, wheat flour about 10 to 12 per cent. Even taking this into consideration, we need to drink about six glasses of water a day.

The Mineral constituents of the food are of vastly more importance than the average person is apt to think. If we consider the chemical composition of the body, we will see more clearly the need of mineral in our diet.

General Composition of the Body.—(From Sherman's "Chemistry of Food and Nutrition.")

Oxygen, about	65%	Phosphorus, about	1%
Carbon, about	18%	Potassium, Sulphur, Sodium, Chlorine, Magnesium, Iron, Iodine, Fluorine, Silicon, all together less than	1%
Hydrogen, about	10%		
Nitrogen, about	3%		
Calcium, about	2%		

Recent investigation has shown that the cause of many diseases such as Rickets, Scurvy, Anaemia, and general non-development is due to a lack of the proper minerals in the food. The minerals are present in such small quantities in the food that we are apt to feel they are not worth considering. Though the amount is small, that amount is essential to proper growth and development, and is vital in the feeding of children especially.

Oxygen, Carbon, Hydrogen and Nitrogen are obtained in large quantities from our carbohydrates, fat, and protein foods; so no special provision is necessary for these.

Calcium and Magnesium occur largely in the skeleton, but also are essential elements of the soft tissues and fluids of the body. It is estimated that about three-fourths of the ash of the body is calcium or lime. Rickets is directly traceable to lack of calcium, causing lack of bone development. Some foods rich in lime are milk, egg yolk, oatmeal, beans. The most practical way to assure enough lime is by the liberal use of milk in the diet of the growing child.

Phosphorus compounds are universally distributed in the body, and are essential to every living cell. Recent experiments make it appear probable that much of the mal-nutrition which has been

attributed to low protein diet is really due to a deficiency of phosphorus. Foods rich in phosphorus are egg yolk, milk, wheat, oatmeal, beans, peanuts, carrots. The most practical and economical method of securing an abundant supply of phosphorus is by the liberal use of milk, eggs and fresh vegetables.

Iron is one of the most important of the ash constituents. It is present in the red corpuscles of the blood. Iron occurs in meat, egg yolk, oatmeal, cereals, spinach, prunes, raisins, and many other foods.

Sodium and Chlorine.—Very little attention need be paid to these minerals, for we take large quantities of both with our food, as common salt.

The other minerals we will get in necessary amounts in an ordinary mixed diet.

Carbohydrates.—Here we take up the foods furnishing the energy to the body. It used to be thought that the man doing heavy work required large amounts of tissue building food, but it is now known that to work requires *energy,* which is supplied mainly by the carbohydrates and fats in our diet.

The carbohydrates are the most abundant sources of our food supply. The chief ones are the simple sugars, found in fresh and dried fruits and honey; the true sugars, such as the cane, beet, maple and milk sugar; and the starches, which are furnished chiefly by potatoes, cereals, bread, corn and many vegetables.

Fats are another important source of fuel, and in cold countries they are the principal source. Here in our temperate regions we do not require much fat,—not more than a tenth to a sixth as much as carbohydrate. Our fat foods are chiefly the animal and vegetable oils.

Protein.—We find protein here as an energy food, and though it is essentially a builder of new tissue, yet the body is so constructed that in time of need the body can utilize protein to supply energy also.

Energy Measured.—We have called these foods energy-producing foods. How is this energy measured? It is measured by the quantity of heat these foods furnish the body. Within the tissues there is true combustion taking place, a union with the oxygen breathed in through the lungs. The unit by which we measure this combustion, is the heat unit, the Calorie. A Calorie is the measure of the amount of heat required to raise

a liter of water 1 degree Centigrade, or about a pint of water 4 degrees Fahrenheit.

The heat furnished by proteins, fats and carbohydrates is not the same, any more than is the heat furnished by wood or coal to an engine the same. We have the factors 4, 9, 4, which mean that every gram of carbohydrate used in the body furnishes 4 calories of heat; for every gram of fat used, 9 calories of heat are liberated, and for every gram of protein used, 4 calories result.

It then becomes a simple matter to calculate how much energy a meal has furnished. Suppose we have taken 10 grams of fat, 150 grams of carbohydrates, and 30 grams of protein at our mid-day meal. To determine the number of calories that meal furnished, multiply by the factors 9, 4, 4. It will become:

10 grams (about ⅓ oz.) of fat multiplied by 9....	90 Calories
150 grams (about 5 ozs.) of carbohydrates multiplied by 4.....	600 Calories
30 grams (about 3 ozs.) of protein multiplied by 4..	120 Calories
Total	810 Calories

We see, then, that food is required for definite use in the body, and not just to satisfy with a delicate flavor or with a comfortable feeling of fullness. If our money is not expended to furnish these definite needs, we are not fulfilling our duty as buyers.

Food containing much *Protein.*	Food containing much *Carbohydrates.*	Food containing much *Fats.*	Food containing much *Mineral.*
Meats	Breakfast foods	Meat fats	Milk
fowl	cornmeal	oils	egg yolk
fish	potatoes	butter	lettuce
milk	flour	bacon	spinach
eggs	rice	cream	prunes
cheese	grits	nuts	raisins
beans	macaroni	cheese	apples
peas	sugar	chocolate	bananas
lentils	honey		carrots
nuts	dried fruits		whole grains

Factors Influencing Individual Requirements.—Besides the consideration of these general needs, the individual requirement must always be considered.

The ordinary family of five represents varied needs. We have here a working man, a woman doing moderate labor, a growing boy and girl, and a small child. The same food and amounts will not meet the requirements in each case. The chief factors influencing the food requirements are (1) work, (2) age, (3) climate, (4) size, (5) sex.

These factors are of varying importance, but each is worth considering. Work is the chief factor, for on this depends the energy expended. The man of average size doing moderate work will require about 3,000 calories a day, which, with hard labor, will be raised to 5,000 calories. The woman will require about 2,000 calories, while the growing child requires from 1,400 to 1,800 calories, and the very young child needs from 900 to 1,200 calories.

Age brings out more prominently the necessity for a larger proportion of building tissue for growth, which is decreased in middle life. The child needs more protein and ash in proportion to its size than the adult, whose chief necessity is for energy and repair.

Climate and size have chiefly to do with the temperature regulation of the body. They show conspicuously when we consider the menu of the Esquimaux, which is made up so largely of fats and oils. The tallow candle to the child of the far North is quite as great a treat as the stick of candy to our children. These large amounts of fat are needed simply to keep the body warm, while in our climate there is no necessity for so much fat.

In the same way the size will affect food requirement, because of the large surface for the dissipation of body heat. The tall, thin man actually requires more food than the short, fat one, as he has more surface to keep warm.

Sex affects the food requirement. A woman of about the same weight as a man will require a little less food because of her physiological make-up. She is rounder, has more subcutaneous fat and less muscle than the man.

Food Requirement.—Many interesting experiments have been

performed to determine the food requirements of the average man.

Atwater's and Benedict's results are as follows:

Man sleeping requires per hour..... 65 Calories
Man sitting at rest requires per hour.....100 Calories
Man at light muscular exercise requires per hour...170 Calories
Man at heavy muscular exercise requires per hour..290 Calories

The daily food requirement for a man at various occupations as estimated by Atwater:

Man at sedentary occupation.....2720 Calories
Man at moderate muscular work.....3400 Calories
Man at hard work.....4080 Calories

The average woman requires about eight-tenths of the requirements of a man; the child from 12 to 14 years requires about seven-tenths; the child from 6 to 9 years requires about five-tenths; while the old person requires from one-tenth to one-thirtieth less than the adult.

Balanced Ration.—We have discussed the total food requirements of the individual; the next point to determine is the relative amounts of protein, fat and carbohydrates needed to provide a balanced ration. It is now conceded by all authorities that a mixed diet composed of protein fat and carbohydrate is the only safe diet, and so each meal of the day should have these elements represented in varying amounts. In our warm climate, fat is not so largely needed, it remains longer in the stomach than the other foods and too much cloys the appetite. Carbohydrate, on the other hand, is a cheaper source of fuel than fat, is more quickly digested, and furnishes the needed bulk to the diet. Protein is needed, but the amount required is still a matter of controversy, for there are two schools of thought, one believing that the high protein diet is the only safe one, while the other feels that a superabundance of protein becomes a drag on the digestive system. A balanced ration should furnish, according to Atwater:

Protein 100 grams, about 3.5 ounces.
Fat 100 grams, about 3.5 ounces.
Carbohydrate 375 grams, about 13.3 ounces.
Total calories, 2,816.

while, according to Chittenden, the diet should furnish:

Protein 60 grams, about 2 ounces.
Fat 80 grams, about 2.83 ounces.
Carbohydrates 360 grams, about 13 ounces.
Total calories, 2,360.

In the case of Atwater about one-seventh of the total calorific requirement is furnished by protein and in the Chittenden standard about one-tenth of food requirement is protein.

The measure of 100 calorie portions in some of our common foods:

Measure of Foods furnishing 100 Calories	Weight in ounces	Calories furnished by		
		Protein	Fat	Carbohydrate
⅓ cup dried apples	1.2	2.20	6.75	90.96
1 1-inch slice bread	1.36	1.44	4.14	81.56
1 tablespoon butter	.46	.52	99.36	....
1.6 oz. beef	1.6	29.04	71.01	....
3.05 oz. beef round	3.05	39.88	59.73	....
1 medium banana	5.5	4.96	5.58	89.28
0.62 oz. bacon	0.62	6.64	93.33	....
1.9 oz. flank steak	1.9	45.32	54.72	....
2 tbsp. kidney beans	1.02	26.12	4.68	69.2
2 tbsp. dried Lima beans	1.	20.68	3.87	75.40
10 oz. carrots	10.	10.28	5.13	84.58
3 cups cabbage	9.	20.32	8.55	71.12
3 tbsp. corn meal	.99	10.36	4.77	84.76
½ square chocolate	.57	8.44	71.73	18.80
1 in. cube American cheese	.8	26.	73.56	.28
1 large egg	2.68	36.24	63.72	....
2¾ tbsp. Cream of Wheat	.97	12.16	3.51	84.36
4 tbsp. sifted flour	1.	12.68	20.02	84.92
2¼ tbsp. hominy	1.	9.40	1.53	89.28
⅝ cup milk	5.	18.08	52.02	28.92
0.98 oz. rolled oats	.88	16.8	16.47	66.68
3 or 4 prunes	....	2.8	.....	97.2
1 medium potato	5.3	10.65	1.35	87.88
10 or 11 peanuts	.85	18.84	63.27	17.88
2 tbsp. rice	1.	9.12	.765	90.16
2 tbsp. sugar	.88	....	.....	100.00
1 1-7 cups tomatoes	15.6	21.24	7.92	70.8

Digestibility of Foods.—In making up menus the digestibility of the food is a most important factor, for no matter how carefully planned, if the food can not be utilized by the body, it is worse than wasted. The digestibility of the food depends largely upon its proper cooking, and the personal pecularities of those eating it. The former, the housewife must control, and the latter, she can cater to.

Order of Meals.—The general order of our meals is breakfast, luncheon, dinner. In planning these meals we must keep all of our principles of nutrition well in mind, remembering that the heavy meal should come at the time of the greatest leisure, and so for that reason dinner, which is the heaviest meal, is well placed in the evening.

Proportion Between Parts of a Meal.—No one food supplies all the needs of adult life, so our menus must consist of a variety of foods. It is essential that we not only plan our day's menu so that we have a balanced ration, but so that there is a proper apportionment of food. We must not have too much heavy food at one meal. Remember, pork or some other heavy meat should not be followed by pie for dessert. A heavy cream soup should be the main dish of a meal, while only a light soup should be used as the first course. Plum pudding should follow a rather light meal, while a water ice is an excellent dessert to follow a heavy dinner.

Never repeat the same flavors in one meal. If we have tomato soup, fresh tomato salad, and baked tomatos as a vegetable, all in one meal, we soon tire of tomatoes, and so if we have the same dish every meal or even every day, we are much more apt to tire of it than if we offered some variety in our menu.

Service.—The service of the meal is worth considering, for often the jaded appetite will respond to a dainty dish, when an unattractive meal will go untouched. Dainty serving when once acquired takes very little more thought or time. A sprig of parsley well placed changes the whole aspect of the meal. Garnish, of course, can be overdone, and this brings us to another element in menu making, and this is the time element.

Time a Factor.—From the economic standpoint alone woman's time in the home is valuable, for as a wage earner she could be

bringing in an income. No ordinary meal has a right to hours of a housewife's time. Too often economy is misplaced, for we have felt that the housewife's time was the only cheap thing. A cheap meat or vegetable that requires much time of the housewife's which could be put to better advantage is poor economy. It is not cheap.

Summary.—The important things to consider in menu making are, (1) the nutritive value of foods, (2) to combine foods so that we shall obtain a well balanced meal suitable to the individual needs of each member of the family, (3) to have combinations digestible and pleasing to the tastes and peculiarities of those for whom it is prepared, (4) a meal moderate in cost, and the money well expended, (5) a meal that has not cost the housewife excessive time in its preparation.

There is no part of the housewife's duties that demands more time or that so richly rewards careful study as the proper planning of the menu.

Children's Meals

Age 2 to 5 years; cost about 15 cents a day, varying with market. Calories about 950 to 1,300.

An inexpensive menu planned on the basis of $1,000 income and three children in the family.

Meal.	Time.	Food.	Amount.
Breakfast	7:30	Orange juice	4 tablespoons
		or prune pulp	4 tablespoons
		or apple sauce	6 tablespoons
		Cream of Wheat	
		or Farina	
		or Wheatena	1-4 cups
		Milk to drink	1 1-2 cups
		Bread (stale)	1 slice
Lunch	11:00	Milk	1 cup
		Bread and butter	1 slice
Dinner	1:00	Baked potato	1 small
		Mashed onions	
		or spinach	1-3 cup

Meal.	Time.	Food.	Amount.
		Bread and butter	1 slice
		Baked apple or prune pulp	1-2 cup
		Milk to drink	1 cup
Supper	5:30	Boiled rice or grits	1 cup
		Milk	3-4 cup
		Bread and butter	1 slice

Children's Meals.

Age 6 to 9 years; cost about 15 cents a day, varying with market. Calories 1,300 to 1,600.

Meal.	Time.	Food.	Amount.
Breakfast	7:30	Cream of Wheat, Farina or Wheatena	1-2 cup
		Top milk	1-4 cup
		Stewed prunes or dates or apricots	5
		Toast	1 slice
		Milk to drink	1 glass
Dinner	1:00	Pea soup or Scotch broth or bean soup	1 cup
		Croutons	1 slice bread
		Boiled onions or spinach	1 serving
		Baked potatoes	1 large
		or rice	1-2 cup
		Cookies	2
Supper	5:30	Cream toast	2 slices bread
		Rice pudding with milk and sugar	1 cup
		Milk to drink	1 glass

Children's Meals

Age 10 to 13 years; cost about 15 cents a day. Calories 1,800 to 2,200.

Meal.	Time.	Food.	Amount.
Breakfast	7:30	Cream of Wheat or Farina or Wheatena	3-4 cup
		Top Milk	1-2 cup
		Stewed prunes or dates or apricots	7
		Toast	2 slices
		Milk to drink	1 cup
Dinner	1:00	Pea soup or bean soup	1 cup
		Baked fish or mutton or roast beef	1 small serving
		Boiled onions or string beans or stewed celery	ordinary serving
		Baked potato	1 large
		or rice, boiled	3-4 cup
		Cookies	3
Supper	6:30	Creamed potatoes	3-4 cup
		Spinach or cauliflower	1-2 cup
		Bread and butter	2 slices
		Poached egg on toast	1 egg and 1 slice bread
		Cabinet pudding	1 cup

Dietary Meal.

Man at sedentary work, or
Woman at moderately active work
Calories: 2,300-2,500
Protein: 75 grams.

Cost: About 25 cents. A moderate price for the cost of raw food material per capita per day.

Meal.	Food.	Amount.
Breakfast	Orange	1
	Bacon	3 thin slices
	Egg—not fried	1
	Toast and butter	2 slices
	Coffee with sugar and cream	1 cup

Meal.	Food.	Amount.
Dinner	Clear soup	1 cup
	Mock duck (round steak)	1 serving
	Baked potato	1 large
	Escalloped cabbage	1 serving
	Apple short cake and cream	Medium serving
Supper	Rice and cheese	3-4 cup
	Baking powder biscuit	2 medium
	Tea with sugar	1 cup
	Stewed apricot	1 sauce dish
	Gingerbread	1 medium square

Dietary Meal.

Man at moderate work, or
Woman at hard work.
Calories: 2,700-3,000.
Protein requirement: 80 grams.

Cost: 25 cents per capita per day. A moderate cost for food materials.

Meal.	Food.	Amount.
Breakfast	Cereal	1-2 cup
	Milk (top)	1-2 cup
	Bacon	2 slices
	Toast and butter	2 slices
	Coffee	1 cup
Dinner	Rump roast and gravy	1 serving
	Rice	1-2 cup
	Boiled onions	2
	Biscuit	2
	Butter	1 ounce
	Tea	1 cup
	Indian pudding	3-4 cup
Supper	Creamed codfish	2-3 cup
	Baked potato	1 large
	Biscuit	2
	Butter	1 ounce
	Stewed peaches	1 sauce dish
	Sugar cookies	2

Dietary Meal.

Man at hard muscular work.
Calories: 2,500-4,000
Protein requirement: 100 grams.

Cost: 25 cents per capita per day. A moderate cost for raw food materials.

Meal.	Food.	Amount.
Breakfast	Grits	3-4 cup
	Sausage	2 balls
	Corn bread	2 squares
	Coffee	1 cup
	Butter	1 ounce
Dinner	Split pea soup	1 cup
	Beef loaf and tomato sauce	1 thick slice
	Escalloped potato	1 serving, large
	Bread and butter	2 slices, thick
	Tea	2 cups
	Norwegian prune pudding	3-4 cup
Supper	Cold beef loaf	1 medium slice
	Baked potato	2 medium potatoes
	Biscuits	4
	Butter	1 ounce
	Baked apple	2 small
	Tea	1 cup

Good Buying

Cost and Food Value of One Day's Rations for a Family of Seven:

Food Materials	Amount	Cost per unit	Food value	Cost
Milk	4 qts.	8 cts. per qt.	2700 calories	$0.32
Bread (stale)	2 loaves	2 1-2 cts. loaf	1760 "	.05
Sugar	3-4 lb.	5 cts. per lb.	1310 "	.0375
Potato	2 1-2 lbs.	15 cts. pk.	750 "	.025
Rutabaga	1 1-2 lbs.	1 1-4 cts. lb.	192 "	.0188
Butterine	1-4 lb.	22 cts. lb.	881 "	.055
Hamburg	1 1-2 lbs.	10 cts. lb.	2070 "	.15
Cocoa (loose)	1-2 oz.	19 cts. lb.	52 "	.0059

Food Materials	Amount	Cost per unit	Food value		Cost
Oatmeal (loose)	1-3 lb.	3 1-3 cts. lb.	600	calories	.0111
Coffee	2 oz.	21 cts. lb.	.....		.0266
Eggs	1-2 doz.	23 cts.	500	"	.115
Tomato (can'd)	1 can	8 1-3 cts. can	105	"	.0833
Cornmeal	1-2 lb.	3 cts. lb.	790	"	.015
Flour	1-2 lb.	2 1-2 cts. lb.	800	"	.013
Figs	1-2 lb.	10 cts. lb.	737	"	.05
Split peas	6 oz.	5 1-2 cts. lb.	610	"	.0206
Lard	2 oz.	12 cts. lb.	500	"	.015

Total Food Value 14,347 Calories. Total cost $1.0118.

Estimate of family composed of:

	Age	Occupation	Weight	Food Requirement
Man	40	Laborer	154 lbs.	3600 calories
Woman	35	Housewife	123 lbs.	2300 calories
Girl	9	.....	57 lbs.	1850 calories
Boy	7	.....	48 lbs.	1700 calories
Girl	5	.....	40 lbs.	1500 calories
Boy	3	.....	34 lbs.	1350 calories
Girl	1 1-2	.....	34 lbs.	1200 calories

Sample Menu

Breakfast: Oatmeal, sugar, and top milk,
Scrambled eggs on toast,
Coffee for adults, milk for children.

Lunch: Puree of split peas with croutons,
Escalloped tomatoes,
Bread with butterine, milk for children.

Supper: Beef loaf with brown gravy,
Baked potatoes, creamed Rutabaga,
Corn muffins with caramel syrup,
Fig pudding,
Coffee for adults, milk for children.

Wasteful Buying

(A day's rations for family of 7.)

	Cost	Amount	Cost per unit	Calories
Rolls	$0.15	15	$0.12 a doz.	1500
Bread	.10	2 loaves	.05 loaf	1700
Sugar	.05	12 oz.	.06 2-3 per lb.	1310
Butter	.10	3 1-2 oz.	.45 5-7 per lb.	700
Pork chops	.40	2 lbs.	.20 per lb.	3200
Coffee	.05	2 oz.	.40 per lb.	....
Tea	.05	1 1-2 oz.	.53 1-3 per lb.	....
Potatoes	.05	2 lbs.	.30 per pk.	800
Milk	.05	1 pt.	.10 per qt.	300
	$1.00			

Total food value: 9,570 calories. Cost: $1.00.
Food requirement: 135,000 calories.

Breakfast: Toast and butter,
Coffee,
Milk for two young children.

Dinner: Pork chops,
Potatoes,
Rolls and butter,
Tea.

Supper: Bread and butter,
Potatoes,
Milk for baby.

Good Buying

Cost and Food Value of One Day's Ration for a Family of Five.

Food Materials	Amount	Cost per unit	Food value	Cost
Rolled oats	1 cup	10c per pk.	282 calories	.0153
Crackers	½ box	10c per box	225 "	.05
Milk	3 qts.	10c per qt.	675 "	.30
Buttermilk	1 qt.	5c per qt.	400 "	.05
Oranges	2½	25c per doz.	192 "	.062

Food Materials	Amount	Cost per unit	Food value		Cost
Eggs	8	25c per doz.	480	calories	.168
Bread	1½ loaf	5c per loaf	1321	"	.075
Butter	½ lb.	35c per lb.	1744	"	.175
Rice	¾ cup	5c per lb.	595	"	.018
Prunes	⅓ lb.	12½c per lb.	242	"	.041
Cheese	1-5 lb.	25c per lb.	372	"	.05
Navy beans	⅓ lb.	8⅓c per lb.	500	"	.027
Gelatin	¾ tbsps.	10c per pkg.	60	"	.023
Sugar	1¾ cups	6¼c per lb.	1680	"	.049
Flour	½ cup	3c per lb.	250	"	.003
Cornstarch	¼ cup	10c per pkg.	197	"	.007
Potatoes	4	35c per pk.	332	"	.029
Carrots	1 bunch	5c per bunch	120	"	.05
Celery	½ bunch	10c per bunch	18	"	.05
Lettuce	1 head	10c per head	36	"	.05

Total Food Value 9,721 Calories. Total Cost $1.2923.

Sample Menu

Breakfast: Oranges,
Rolled oats with top milk.
Eggs on toast,
Milk for the children.

Luncheon: Cream of navy bean soup, crackers,
Rice cooked with cheese.
Creamed celery.
Whole wheat bread and butter,
Norwegian prune pudding,
Buttermilk,
Eggs and milk for the children.

Dinner: Roast beef, potatoes, creamed carrots,
Bread,
Lettuce salad with French dressing,
Crackers,
Snow pudding with soft custard.

Food Costing $1.00.

Good Expenditure for Nourishment.

Luncheon for 8 people.

Lentil soup and croutons:

Milk	$0.10	
Lentils	.03	
Butter	.04	$0.185
Bread	.015	

Apple and nut salad:

Nuts	$0.10	
Apples	.15	.35
Dressing—egg yolks	.10	
Baking powder biscuits		.07
Butter		.08

Prune whip with custard:

Sugar	$0.03½	
Prunes	.08	
Eggs, whites	.10	.315
Custard	.10	
Total		$1.00

Total calories per person: 800.

Food Costing $1.00

Poor Expenditure for Nourishment

Luncheon for 8 people

Consomme:

Soup meat	$0.15	
Vegetables	.05	$0.20
Escalloped oysters		.40
Biscuit and butter		.15

String bean salad:		
Lettuce	$0.05	
Beans	.07	.15
Dressing	.03	
Jello		.10
Total		$1.00

Total calories per person: 400.